IN THE CLAIMS:

The claims are as follows:

1. (Previously amended) A piston and connecting rod assembly for use with an internal combustion engine, said assembly comprising:

a piston adapted for reciprocal movement within a cylinder of the internal combustion engine, said piston having a body including a pin bore formed therein;

a connecting rod adapted to interconnect said piston and a crankshaft so as to translate the reciprocal movement of the piston into rotational movement of the crankshaft, said connecting rod having first and second ends with at least one of said ends including a bore extending therethrough and adapted to be aligned with said pin bore in said piston;

a pin adapted to be operatively received through said aligned pin bore in said piston and said bore extending through said end of said connecting rod, said pin including a pair of distal ends, a center portion formed therebetween and a smoothly profiled outer circumference that is substantially circular in cross-section with a larger diameter at said distal ends than at said center portion and tapers gradually from said distal ends to said center portions; and

said end of said connecting rod aligned with said piston pin bore including a phosphatized coating that is adapted to facilitate relative angular movement between said bore extending through said connecting rod and said outer circumference of said profiled piston pin thereby facilitating reciprocal motion of said piston relative to the cylinder of an internal combustion engine, said phosphatized coating having a thickness between two and less than eight microns.

2. (Original) The assembly as set forth in claim 1 wherein said bore extending through said end of said connecting rod defines an inner circumference, said phosphatized coating is bonded to said inner circumference so as to be interposed between said inner circumference and said pin.

3. (Original) The assembly as set forth in claim 1 wherein said connecting rod further includes an internal gallery juxtaposed between said first and second ends to direct lubricant between said first and second ends.

4. (Original) The assembly as set forth in claim 1 wherein said connecting rod includes a terminal end and a bore housing depending therefrom wherein said bore housing tapers inwardly toward said terminal end.

5. (Original) The assembly as set forth in claim 1 wherein said pin includes a phosphatized coating disposed about said profiled outer circumference.

6. (Original) The assembly as set forth in claim 1 wherein said pin bore in said piston body defines an inner circumference including a phosphatized coating interposed between said inner circumference and said pin.

7. (Previously amended) A piston and connecting rod assembly for use with an internal combustion engine, said assembly comprising:

a piston adapted for reciprocal movement within a cylinder of the internal combustion engine, said piston having a body including a pin bore formed therein;

a connecting rod adapted to interconnect said piston and a crankshaft so as to translate the reciprocal movement of the piston into rotational movement of the crankshaft, said connecting rod having first and second ends with at least one of said ends including a bore extending therethrough and adapted to be aligned with said pin bore in said piston;

a pin adapted to be operatively received through said aligned pin bore in said piston and said bore extending through said end of said connecting rod, said pin including a pair of distal ends, a center portion formed therebetween and a smoothly profiled outer circumference that is substantially circular in cross-section with a larger diameter at said distal ends than at said center portion and tapers gradually from said distal ends to said center portions, said profiled outer circumference having a phosphatized coating bonded thereto to facilitate relative angular movement between said bore extending through said connecting rod and said outer circumference of said profiled piston pin thereby facilitating reciprocal motion of said piston relative to the cylinder of an internal combustion engine, said phosphatized coating having a thickness between two and less than eight microns.

8. (Original) The assembly as set forth in claim 7 wherein said bore extending through said end of said connecting rod defines an inner circumference having a phosphatized coating bonded thereto, said Phosphatized coating interposed between said inner circumference of said bore and said outer circumference of said profiled piston pin.

9. (Original) The assembly as set forth in claim 7 wherein said connecting rod further includes an internal gallery fixedly between said first and second ends and adapted to direct lubricant between said first and second ends.

10. (Original) The assembly as set forth in claim 7 wherein said end of said connecting rod includes a terminal end and a bore housing depending therefrom wherein said bore housing tapers inwardly toward said terminal end.

11. (Original) The assembly as set forth in claim 7 wherein said pin bore of said piston body defines an inner circumference having a phosphatized coating between said inner circumference and said pin.

12. (Previously amended) A piston and connecting rod assembly for use with an internal combustion engine, said assembly comprising:

a piston adapted for reciprocal movement within a cylinder of the internal combustion engine, said piston having a body including a pin bore formed therein;

a connecting rod adapted to interconnect said piston and a crankshaft so as to translate the reciprocal movement of the piston into rotational movement of the crankshaft, said connecting rod having first and second ends with at least one of said ends including a bore extending therethrough and adapted to be aligned with said pin bore in said piston, said connecting rod having an internal gallery fixedly between said first and second ends to direct lubricant between said first and second ends;

a pin adapted to be operatively received through said aligned pin bore in said piston and said bore extending through said end of said connecting rod, said pin including a pair of distal ends, a center portion formed therebetween and a smoothly profiled outer circumference that is substantially circular in cross-section with a larger diameter at said distal ends than at said center portion and tapers gradually from said distal ends to said center portions; and

said end of said connecting rod aligned with said piston pin bore including a phosphatized coating that is adapted to facilitate relative angular movement between said bore extending through said connecting rod and said outer circumference of said profiled piston pin thereby facilitating reciprocal motion of said piston relative to the cylinder of an internal combustion engine.

13. (Previously amended) The assembly as set forth in claim 12 wherein said bore extending through said end of said connecting rod defines an inner circumference, said phosphatized coating is bonded to said inner circumference so as to be interposed between said inner circumference and said pin, said phosphatized coating having a thickness between two and less than eight microns.

14. (Original) The assembly as set forth in claim 12 wherein said connecting rod includes a terminal end and a bore housing depending therefrom wherein said bore housing tapers inwardly toward said terminal end.

15. (Original) The assembly as set forth in claim 12 wherein said pin includes a phosphatized coating disposed about said profiled outer circumference.

16. (Original) The assembly as set forth in claim 12 wherein said pin bore in said piston body defines an inner circumference including a phosphatized coating interposed between said inner circumference and said pin.

17. (Original) The assembly as set forth in claim 12 wherein said pin bore of said piston pin bore includes an inner circumference having side relief channels adapted to receive lubrication between said pin and said inner circumference of said piston pin bore.

18. (Previously amended) A piston and connecting rod assembly for use with an internal combustion engine, said assembly comprising:

a piston adapted for reciprocal movement within a cylinder of the internal combustion engine, said piston having a body including a pin bore formed therein;

a connecting rod adapted to interconnect said piston and a crankshaft so as to translate the reciprocal movement of the piston into rotational movement of the crankshaft, said connecting rod having first and second ends with at least one of said ends including a bore extending therethrough and adapted to be aligned with said pin bore in said piston, said connecting rod having an internal gallery fixedly between said first and second ends to direct lubricant between said first and second ends; and

a pin adapted to be operatively received through said aligned pin bore in said piston and said bore extending through said end of said connecting rod, said pin including a pair of distal ends, a center portion formed therebetween and a smoothly profiled outer circumference that is substantially circular in cross-section with a larger diameter at said distal ends than at said center

portion and tapers gradually from said distal ends to said center portions, said profiled outer circumference having a phosphatized coating bonded thereto.

19. (Previously amended) The assembly as set forth in claim 18 wherein said phosphatized coating bonded to said profiled outer circumference having a thickness between two and less than eight microns.

20. (Original) The assembly as set forth in claim 18 wherein said bore extending through said end of said connecting rod defines an inner circumference, said inner circumference including a phosphatized coating is bonded to said inner circumference so as to be interposed between said inner circumference and said pin.